



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,073	01/31/2001	Yasufumi Ichikawa	NGB-33220	7828
<div>116 7590 02/08/2008</div> <div>PEARNE & GORDON LLP</div> <div>1801 EAST 9TH STREET</div> <div>SUITE 1200</div> <div>CLEVELAND, OH 44114-3108</div>				
			EXAMINER	
			NGUYEN, TU X	
			ART UNIT	PAPER NUMBER
			2618	
			MAIL DATE	DELIVERY MODE
			02/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/762,073

Applicant(s)

ICHIKAWA, YASUFUMI

Examiner

Tu X Nguyen

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-6,9,11-19,21 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-6,9,11-19,21 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

Applicant's arguments, dated 12/17/07, with respect to claims 21-25, have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

Claims 15-19 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2-3, 9, 11-15, 18-19 and 21-25, are rejected under 35 U.S.C. 102(e) as being anticipated by Minami et al. (US Patent 6587510).

Regarding claims 21 and 23-25, Minami et al. disclose a radio communications apparatus having a transmission power control feature for controlling the transmission power of said apparatus, said apparatus comprising:

Art Unit: 2618

a transmission power control bit change detector for extracting a transmission power control bit from a signal received from a distant station (see fig.3, elements 13 and S5, col.7 lines 49-55);

a communication state detector for detecting one or more of: a change in the reception power of the received signal obtained by comparing a previous reception power with a current reception power, and the current transmission power of the distant station (see col.11 lines 33-41) and/or said apparatus; and

a transmission power control step range changer for internally changing a variable power step amount of a transmission power control step (see col.11 lines 50-51, col.12 lines 12-13) and based on both the transmission power control bit and the detected one or more of: change in the reception power of the received signal obtained by comparing the previous reception power with the current reception power, the transmission power of the distant station, and the current transmission power of the distant station (see col.11 lines 33-41) and/or said apparatus; and

wherein said apparatus internally increases or decreases a transmission power of a transmitted signal to the distant station by the changed power step amount in response to the transmission power control bit received from the distant station (see fig.5).

Regarding claim 22, Minami et al. disclose a transmission power control method for a radio communications apparatus having a transmission power control feature for controlling the transmission power of said apparatus, said apparatus comprising:

Art Unit: 2618

a transmission power control bit change detector for extracting a transmission power control bit from a signal received from a distant station (see fig.3, elements 13 and S5, col.7 lines 49-55);

a communication state detector for detecting one or more of: a change in the reception power of the received signal obtained by comparing a previous reception power with a current reception power, and the current transmission power of the distant station (see col.11 lines 33-41) and/or said apparatus, and a change in the transmission power control bit;

the apparatus having a transmission power control step range changer for internally changing a variable power step amount of a transmission power control step based on both the transmission power control bit and the detected one or more of: change in the reception power of the received signal obtained by comparing the previous reception power with the current reception power, and the transmission power of the distant station (see col.11 lines 33-41), the current transmission power of said apparatus, and the change in the transmission power control bit; wherein said apparatus internally increases or decreases a transmission power of a transmitted signal to the distant station by the changed power step amount in response to the transmission power control bit received from the distant station (see fig.5).

Regarding claim 23, Minami et al. disclose a transmission power control method for a radio communications apparatus for controlling a transmission power of the apparatus, said method comprising:

the apparatus having a transmission power control bit extraction step for extracting a transmission power control bit from a signal received from a distant station (see fig.3, elements 13 and S5, col.7 lines 49-55);

the apparatus having a communication state detecting step which detects one or more of: a change in the reception power of the received signal obtained by comparing a previous reception power with a current reception power (see col.11 lines 33-41), and

a change in the transmission power control bit; the apparatus having a transmission power control step range changing step which internally changes a variable power step amount of a transmission power control step based on both the transmission power control bit and the detected one or more of: the change in the reception power of the received signal obtained by comparing the previous reception power with the current reception and said apparatus internally increasing or decreasing a transmission power of a signal transmitted to the distant station by the changed power step amount (see fig.5).

Regarding claim 24, Minami et al. disclose a radio communications apparatus having a transmission power control feature for controlling the transmission power of said apparatus, said apparatus comprising:

a transmission power control bit change detector for extracting a transmission power control bit from a signal received from a distant station (see fig.3, elements 13 and S5, col.7 lines 49-55);

a communication state detector for detecting a change in the reception power of the received signal obtained by comparing a previous reception power with a current reception power (see col.11 lines 33-41), and

a transmission power control step range changer for internally changing a variable power step amount of a transmission power control step based on both the transmission power control bit and the detected change in the reception power of the received signal obtained by

Art Unit: 2618

comparing the previous reception power with the current reception power (see col.11 lines 33-41, wherein

said apparatus internally increases or decreases a transmission power of a transmitted signal to the distant station by the changed power step amount in response to the transmission power control bit received from the distant station (see fig.5).

Regarding claim 25, Minami et al. disclose a radio communications apparatus having a transmission power control feature for controlling the transmission power of said apparatus, said apparatus comprising:

a transmission power control bit change detector for extracting a transmission power control bit from a signal received from a distant station (see fig.3, elements 13 and S5, col.7 lines 49-55);

a communication state detector for detecting a change in the reception power of the received signal obtained by comparing a previous reception power with a current reception power (see col.11 lines 33-41); and

a transmission power control step range changer for internally changing a variable power step amount of a transmission power control step based on the detected change in the reception power of the received signal obtained by comparing the previous reception power with the current reception power (see col.11 lines 50-51, col.12 lines 12-13); wherein

said apparatus internally increases or decreases a transmission power of a transmitted signal to the distant station by the changed power step amount in response to the transmission power control bit received from the distant station (see fig.5).

Art Unit: 2618

Regarding claim 2, Minami et al. disclose communication state detector has a reception power change detector which detects a change in reception power change detector which detects the change in reception power of the received signal (see col.5 lines 52-56).

Regarding claim 3, Minami et al. disclose communication state detector has a transmitting station power change detector which detects the transmission power of the distant station (see col.5 lines 52-56).

Regarding claim 9, Minami et al. disclose reception power change detector has a reception power threshold comparator which compares the reception power with a predetermined threshold (see col.6 lines 15-20).

Regarding claim 11, Minami et al. disclose communication state detecting step has a reception power change detecting step which detects a change in reception power, wherein said transmission power control range changing step changes the variable power step amount depending on the detected change in reception power (see col.11 lines 50-51, col.12 lines 12-13).

Regarding claim 12, said communication state detecting step has a distant station transmission power change detecting step which detects a change in transmission power in the distant station and a reception power change detecting step which detects a change in the reception power, wherein said transmission power control step range changing step changes the power step amount of the transmission power control step depending on the detected change in the transmission power in the distant station and the detected change in reception power (see col.11 lines 50-51, col.12 lines 12-13).

Regarding claim 13, Minami et al. disclose said communication state detecting step has a control state detecting step which detects the control state of the apparatus, wherein said transmission power control step range changing step changes the power step amount of the transmission power control step depending on the detected control state (see col.11 lines 50-51, col.12 lines 12-13).

Regarding claim 14, Minami et al. disclose said communication state detecting step has a local station transmission power change detecting step which detects a change in transmission power in the apparatus and a transmission power control bit change detecting step which detects a change in the transmission power control bit, wherein said transmission power control step range changing step changes the power step amount of the transmission power control step depending on the detected change in transmission power of the apparatus and the detected change in the transmission power control bit (see col.11 lines 50-51, col.12 lines 12-13).

Regarding claim 15, Minami et al. disclose the transmission power control apparatus according to detecting step has a reception power comparing step which compares a previous reception power with a current reception power, wherein a change in reception power is detected based on the comparison results of the reception power comparing step ((see col.11 lines 33-41).

Regarding claim 18, Minami et al. disclose said reception power change detecting step has a reception power threshold comparing step for comparing the reception power with a predetermined threshold, wherein a change in reception power is detected based on the comparison results of the reception power threshold comparing step (see col.6 lines 15-20).

Regarding claim 19, Minami et al. disclose a computer-readable recording medium for storing a program for use by a computer for executing the transmission power control method for the radio communications apparatus (see abstract, it is inherent that the mobile station carries out the processing steps by the stored executable programming instructions).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6 and 16-17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Minami et al. (US Patent 6587510) in view of Takano (US Patent 5,924,043).

Regarding claims 4-6, Minami et al. fail to disclose communication state detector has a control state detector which detects a control state of the apparatus.

Takano discloses communication state detector has a control state detector which detects a control state of the apparatus (see col.6 lines 55-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Minami et al. with the above teaching of Takano in order minimize excessive power transmission.

Regarding claim 16, Minami et al. fail to disclose said reception power change detecting step has a fading pitch detecting step which detects the fading pitch of reception power, wherein a change in reception power is detected based on the detected fading pitch.

Takano discloses said reception power change detecting step has a fading pitch detecting step which detects the fading pitch of reception power, wherein a change in reception power is detected based on the detected fading pitch (see col.13 lines 29-44). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Minami et al. with the above teaching of Takano in order to adjust transmission power to compensate path loss between the transmitter and the receiver when the receiver changing position.

Regarding claim 17, Minami et al. fail to disclose reception power change detecting step has a reception power comparing step which compares a previous reception power with a current reception power and a fading pitch detecting step for detecting the fading pitch of reception power.

Takano discloses reception power change detecting step has a reception power comparing step which compares a previous reception power with a current reception power (see col.10 lines 5-8) and a fading pitch detecting step for detecting the fading pitch of reception power (see col.13 lines 37-44). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Minami et al. with the above teaching of Takano in order minimize excessive power transmission.

Conclusion

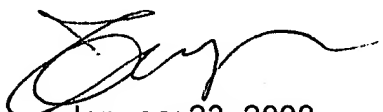
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is 571-272-7883.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



January 23, 2008



EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600